TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL NASA/GODDARD SPACE FLIGHT CENTER REQUEST FOR TASK PLAN / TASK ORDER COMPACTRO/GASCHO CONTRACTOR JOB ORDER NUMBER NAS5-TASK NO. AMENDMENT 99124 QSS Group, Inc. 405-218-80-20-89 99 TASK TITLE: (NTE 80 characters; include Project name) **TDRS Project Engineering Services** APPROVACE: (type or point name and sign) ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR) DATE MAIL CODE PHONE CODE 5/10/99 405 Anthony B. Comberiate 405 301-286-8520 BRANCH HEAD Anthony B. Comberiate 301-286-8520 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) 5/10/99 Fred Huegel 568 301-286-2285 FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? CONTRACTING OFFICER'S QUALITY REP. DESIGNATED FAM: (IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK) Larry Moore The contractor shall identify and explain the reason for any deviations, exceptions, (To be completed by Contracting Officer) or conditional assumptions taken with respect to this Task Order or to any of the C.O. Requested Quote on: technical requirements of the Task Order Statement of Work and related specifications. Date: MAY 1 2 1999 The contractor shall complete and submit the required Reps and Certs. Contractor will develop specification or statement of work under this task for a future proc (x) NO () YES Flight hardware will be shipped to GSFC for testing prior to final de () No () YES Government Furnished Property/Facilitic (x) No () YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only) Onsite Performance: If yes: (X) YES (X) TOTAL () PARTIAL If partial, indicate onsite work in SOW by asterisk (*) Surveillance Plan Attached: (X) NO () YES Highlighted Contract Clauses: (to be completed by Contracting Officer) Per Clause H.14, Task Ordering Procedure, subparagraph (f), the effective date of this task order shall be May 12, 1999. INCENTIVE FEE STRUCTURE (check one) (See Contract NAS5-99124, Attachment K, Incentive Fee Plan) X_ No. 3 No. 2 No. 1 No. 4 No. 5 Cost 10% 50% 25% 25% % Schedule 15% 25% 25% 50% % Technical 75% 25% 25% % 50% The target cost of this task order is \$511,834The target fee of this task order is $\frac{33,269}{}$ The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 545,103 The maximum fee is \$ 48,624 The minimum fee is \$0. AUTHORIZED SIGNATURE Lorrie L. Eakin Contracting Officer SIGNATURE OF CONTRACTING OFFICER TYPED NAME OF CONTRACTING OFFICER AUTHORIZED SIGNATURE

GSFC FORM 703-1845

12/98 (OLDER VERSIONS ARE OBSOLETE)

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR CONTRACT NO. TASK NO. AMENDMENT

OSS Group, Inc.

99124

Applicable paragraphs from contract Statement of Work:

Function 2B

STATEMENT OF WORK:

Systems engineering analyzing the design, development, fabrication, test, deployment, and operation of the TDRS space, ground and launch segments. This activity includes review, analysis and evaluation of the Prime Contractor's end-to-end design including the functional, performance, and operational aspects to establish compliance with Project requirements. This activity maintains analysis of appropriate Prime Contractor system budgets including pointing, mass, power, link, reliability, and other budgets as directed by the Project to assure compliance with requirements. This activity provides for the review, analysis and development of recommendations dealing with Interface Control Documents, launch vehicle interfaces and launch vehicle operations. This activity requires the leadership/participation in Prime Contractor and launch vehicle supplier design, development, and test reviews to resolve issues and assure contract conformance.

Subsystem and Communication Payload Engineering analyzing the design, development, fabrication test and integration of the spacecraft bus and payload subsystems. This activity requires the analysis and review of specifications, drawings, performance reports, test plans and demonstrations at the subsystem component level by the Prime Contractor to: 1) ensure compliance with requirements, 2) assure quality, 3) ensure compatibility with system requirements, 4) assure performance in the operating environment. This activity also provides the development and operation of simulations of payload communication performance, and of other subsystems as necessary.

Operations engineering analyzing the TDRS flight and ground software architecture design and performance, and the tracking, telemetry, and control system RF and digital design and performance. This activity requires review, analysis, and development of recommendations dealing with software design, development processes, and algorithm development and test.

Launch and on-orbit operations engineering analyzing the documentation, plans, procedures, test and telemetry to verify proper systems performance. This activity requires the review, analysis, and development of recommendations dealing with launch, deployment, on-orbit test, and control center functions. The activity may require the assessment of anomalies and developing recommended courses of action. In addition, this activity includes preparing and reviewing prelaunch testing and integrated simulation activities; monitoring flight performance and providing assessments of data and anomalies and recommending courses of action; and providing assessments of on-orbit tests and control center operations and recommending courses of action to assure compliance with performance requirements.

PERFORMANCE SPECIFICATIONS:

Progress Reports and Trip Reports shall summarize personal interfaces, content of meeting/review attended, and analyses of spacecraft progress, problems/issues and test results.

Major activities shall be clearly summarized and analyzed with rational included.

APPLICABLE DOCUMENTS:

Not applicable.

TASK END DATE:

4/30/00

MILESTONES/DELIVERABLES AND DATES:

Progress Reports: Weekly

Trip Reports: Within 3 days after completion of travel

Special Reports needed by the Project shall be prepared according to the schedule established by Project Management.

Action Items assigned to this activity shall be dispositioned in a timely manner.

PERFORMANCE STANDARDS:

Schedule:

On-time delivery of the above

Technical:

Major activities shall be clearly summarized and analyzed with rationale included

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Anthony Comberiate, building 12, room C4F